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# MedCLIVAR 2014 Conference

## Understanding Climate Evolution and Effects on Environment and Societies in the Old World region

Cultural and Congress Center, Middle East Technical University (METU)  
Ankara, Turkey, 23-25 June 2014



## PROGRAMME

### Monday, 23 Jun

08:00-09:00 **Registration**

09:00-09:15 **Opening** – METU Rector, Emin Özsoy, Piero Lionello

### SESSION 1 - PALEOCLIMATE AND THE HUMAN DIMENSION

09:15-10:45

#### **Session 1 (Chair: Giovanni Zanchetta)**

- 09:15-09:45 **Andrey Tchepalyga** - The Holocene Black Sea level oscillations: connections with the Mediterranean Sea and ancient societies (**Invited talk**)
- 09:45-10:00 **Eleonora Regattieri**, Giovanni Zanchetta, Russell Neil Drysdale, Biagio Giaccio, Ilaria Isola, John C Hellstrom, Sebastien Nomade, Chiara Boschi - MIS5 hydrological variability from D18O composition of speleothms and lakes carbonates from Apennine sites (Italy)
- 10:00-10:15 **Sena Akçer-Ön**, Kadir Eriş, Tuğçe Nagihan Arslan, Zeki Bora Ön, Dursun Acar - Late Pleistocene-Holocene climate variability from Lale Hazar (SE Turkey) sedimentary records
- 10:15- 10:30 **Elena Ivanova**, Maria Zenina, Fabienne Marret, Ivar Murdmaa, Andrey Tchepalyga, Lee Bradley, Maria Zyryanova - The Early Holocene Black Sea reconnection with the Mediterranean: implications for biotic and ecological changes on the northeastern shelf

10:30-11:00 **Short coffee break**

11:00-12:30

**Session 1 (Chair: Elena Ivanova)**

- 11:00-11:15 **Zeki Bora Ön**, Mehmet Sinan Özeren, Mehmet Namık Çağatay, Kürşad Kadir Eriş - Late Pleistocene-Holocene climatic cycles from eastern Turkey: Lake Van and Lake Hazar sediment records
- 11:15- 11:30 **Ana Perez-Sanz**, Penélope González-Sampériz, Blas Valero-Garcés, Ana Moreno, Mario Morellón, Graciela Gil-Romera, María Rieradevall, Pol Tarrats - Holocene vegetation dynamics in the central Pyrenees (Spain) **(Invited talk)**
- 11:30-11:45 **Amy L. Prendergast**, Rhiannon E. Stevens, Graeme Barker, Tamsin C. O'Connell - A Late Pleistocene refugium in North Africa? Paleoenvironmental reconstruction from stable isotopes analyses of terrestrial Gastropods (Haua Fteah Libya)
- 11:45-12:00 **Giovanni Zanchetta**, Mira Bar-Matthews, Russell Drysdale, Piero Lionello, Avner Ayalon, John Hellstrom, Ilaria Isola, Eleonora Regattieri - Coeval dry events in the central and eastern Mediterranean basin at 5.2 and 5.6 ka recorded in Corchia (Italy) and Soreq Cave (Israel) speleothems

12:00-14:00 **Lunch and poster viewing** (includes 4min presentations in front of posters)

## **SESSION 2 - THE REGIONAL CLIMATE SYSTEM: OBSERVATIONS AND PROCESS STUDIES**

14:00-15:30

**Session 2 (Chair: Hadas Saaroni)**

- 14:00-14:30 **Georg C. Leckebusch**, Katrin Nissen, and Uwe Ulbrich – Extreme events and uncertainties in the Mediterranean: cyclones and wind storms **(Invited talk)**
- 14:30-14:45 **Baruch Ziv**, Tzvi Harpaz, Hadas Saaroni, Richard Blender – The source of Mediterranean cyclones through analysis of 'parent - daughter' relationship using a new objective method
- 14:45-15:00 **Ségolène Berthou**, **Philippe Drobinski**,cp Sylvain Mailler, Thomas Arsouze, Sophie Bastin, Karine Béranger, Cindy Lebeauvin Brossier – When and where are Mediterranean heavy rain events sensitive to atmosphere-ocean coupled processes?
- 15:00-15:15 **Matteo Zampieri**, Enrico Scoccimarro, Silvio Gualdi – Observed snowfall and river discharge trend and low-frequency variability over Alps
- 15:15-15:30 **Ufuk Turunçoğlu** – Sea surface temperature-precipitation relationship over Anatolian peninsula and Mediterranean region using fully coupled regional climate model
- 15:30-15:45 **Mustafa Gökmen**, Barış Önel, Ömer Lütfi Şen – A regional climate model versus a surface energy balance model in estimating evapotranspiration under water and energy-limited conditions of the Konya basin

15:45-16:15 **Coffee break and poster viewing** (includes 4min presentations in front of posters)

16:15-17:45

**Session 2 (Chair: Gabriel Jordà)**

- 16:15-16:30 **Murat Gündüz**, Emin Özsoy - Inter-annual variability of upper layer blocking of the Dardanelles Strait and its connection with the fish catch in the Aegean sea (1979-2013) **(invited talk)**
- 16:30-16:45 **Dimitris Velaoras**, George Krokos, Alexander Theocharis – A recurrent, salinity driven, dense intermediate water outflow from the Cretan Sea as a manifestation of thermohaline circulation changes
- 16:45-17:00 **Sarantis Sofianos**, Vassilis Vervatis, Anneta Mantziafou, Mihalis Ravdas – Investigating deep-water formation variability in the Aegean Sea and its influence in the adjacent basins deep circulation

- 17:00-17:15 **Karina Von Schuckmann**, Giulio Notarstefano, Francisco Calafat, Pierre-marie Poulain, Isabelle Taupier-letage, Louis Prieur, Mathieu Hamon, Nicolas Reul – Regional ocean indicators in the Mediterranean Sea from in situ measurements during 2004-2012
- 17:15-17:30 **Gianmaria Sannino**, Adil Sözer, Emin Özsoy – Recent advancements on modelling the exchange flow dynamics through the Turkish Strait System
- 17:30-17:45 **Nadia Pinardi**, Claudia Fratianni, Simona Simoncelli, Vladislav Lyubarstev, Paola Cessi – The large scale general circulation of the Mediterranean Sea: mean and decadal variability from the MFS re-analysis

18:00 ICE BREAKER Welcome Party at the Uptown Café, at the rear end of the Culture and Congress Center, starting shortly after the end of Monday's meeting.

## Tuesday, 24 Jun

### SESSION 3 - EXTREME EVENTS

09:00-10:30

**Session 3 (Chair: Andrea Toreti)**

- 09:00-09:30 **Annalisa Molini** – Aridity, Intermittency and Extremes: Predicting hydrological extremes in hyper-arid Regions (**Invited talk**)
- 09:30-09:45 **Murat Türkeş**, Haim Kutiel – Climatological analysis of spatial variability in rain- spell characteristics in Turkey for the period 1970 to 2011
- 09:45-10:00 **Enrico Scoccimarro**, Gabriele Villarini, Silvio Gualdi, Alessio Bellucci, Matteo Zampieri, Antonio Navarra – Extreme precipitation events over the Euro-Mediterranean region: projections dependence on daily/sub-daily time scale definition
- 10:00-10:15 **Hadas Saaroni**, Baruch Ziv, Judith Lempert, Yael Gazit, Efrat Morin – Synoptic configurations responsible for prolonged dry spells in the Levant
- 10:15-10:30 Vassiliki Iordanidou, Aristeidis G. Koutroulis, **Ioannis K. Tsanis** – Cyclone-precipitation analysis for the island of Crete, Greece

10:30-11:00 **Coffee break and poster viewing** (includes 4min presentations in front of posters)

11:00-12:30

**Session 3 (Chair: Murat Türkeş)**

- 11:00-11:15 **David Barriopedro** – Revisiting blocking definition and associated impacts (**Invited talk**)
- 11:15-11:30 **Leone Cavicchia**, Silvio Gualdi, Hans Von Storch – Mediterranean tropical-like cyclones in present and future climate
- 11:30-12:00 **Simon O. Krichak** – The role of recent moisture transport trends in the climatology of extreme precipitation over the Euro-Mediterranean region (**Invited talk**)
- 12:00-12:15 **Alper Onen**, Ismail Yücel – Analyses of flood events using regional hydrometeorological modeling system
- 12:15-12:30 **Haim Kutiel**, Murat Türkeş – Spatial and temporal variability of dryness distribution in Turkey

12:30-14:00 **Lunch and poster viewing** (includes 4min presentations in front of posters)

14:00-15:30

**Session 3 (Chair: Elena Xoplaki)**

- 14:00-14:15 **Simone Russo**, Alessandro Dosio, Paulo Barbosa, Juergen Vogt – Extreme heat waves in present climate and their projection in a warming Mediterranean region
- 14:15-14:30 **Charles Hernandez**, Philippe Drobinski, Solène Turquety – Total fire size and fire radiative power in the Euro-Mediterranean area: different behaviors with respect to synoptic meteorology

## SESSION 4 - MODEL SIMULATIONS OF CLIMATE VARIABILITY AND CLIMATE CHANGE

### Session 4 (Chair: Serge Planton)

- 14:30-15:00 **Piero Lionello** – An update on the med-cordex simulations (**Invited talk**)  
15:00-15:15 **Birgit Mannig**, Heiko Paeth – The added value of regional climate modelling in the assessment of climate change in the Mediterranean region  
15:15-15:30 **Gianmaria Sannino**, Adriana Carillo, Giovanna Pisacane, Mario Adani, Massimiliano Palma, Cristina Naranjo – On the improvement of the simulated Mediterranean Sea inter-annual variability

15:30–16:00 **Coffee break and poster viewing** (includes 4min presentations in front of posters)

16:00 -17:45

### Session 4 (Chair: Piero Lionello)

- 16:00-16:15 **Gabriel Jordà** – Uncertainty in Mediterranean Sea observational and numerical climate products (**Invited talk**)  
16:15-16:30 **Giuseppe Zappa**, Matt Hawcroft, Emily Black, David Brayshaw, Len Shaffrey – Extratropical cyclones and the Mediterranean precipitation decline in the CMIP5 models future projections  
16:30-16:45 M. Tufan Turp, **Tuğba Öztürk**, Murat Türkeş, M. Levent Kurnaz – Investigation of projected changes for near future air temperature and precipitation climatology of Turkey and surrounding regions by using REGCM4.3.5  
16:45-17:00 **Ceren Ballı**, Yurdanur S. Ünal, Stefanie Vogl, Harald Kunstmann – Bias correction of precipitation simulated by regional climate model over Turkey  
17:00-17:15 **Andrea Toreti**, Philippe Naveau – An evaluation of climate model simulated precipitation extremes over the Euro-Mediterranean region  
17:15-17:30 **Batuhan Eren Engin**, İsmail Yücel – The influence of downscaling and model calibration on flow predictions for past and future climate: OMERLI case study  
17:30-17:45 **Gerhard Smiatek**, Harald Kunstmann – Future water availability in the upper Jordan Catchment (UJR)

Social dinner (Dinner at Çengelhan / Rahmi Koç Museum, Ankara Citadel, bus service provided, leaving from the conference venue at 18:30)

**Wednesday, 25 Jun**

## SESSION 5 - IMPACTS OF NATURAL AND ANTHROPOGENIC CLIMATE CHANGE AND MITIGATION/ADAPTATION STRATEGIES

### 09:00-10:30 Session 5 (Chair: Nadia Pinardi)

- 09:00-09:30 **Mladen Todorovic**, Piero Lionello, Luis S. Pereira, Claudia Pizzigalli, Sameh Saadi, Lazar Tanasijevic - Impacts of climate change on Mediterranean crops (**Invited talk**)  
09:30-09:45 **Ayşen Yılmaz**, Selin Küçükavşar, Hakan Ercan – Black Sea ecosystem sensitivity and vulnerability to climate change: impacts on fishery economy  
09:30-10:00 **İsmail Yücel**, Abdülkadir Güventürk, Ömer Lütfi Şen – Climate change impacts on snowmelt runoff for mountainous transboundary basins in eastern Turkey  
10:00-10:15 **Erdem Özer**, Chris Holt – Turkey policy on adaptation to climate change

10:15-10:45 **Coffee break and poster viewing** (includes 4min presentations in front of posters)

10:45-12:30 **Session 5 (Chair: Hadas Saaroni)**

- 10:45-11:00 **Ömer Lütfi Şen**, Ozan Mert Göktürk, Deniz Bozkurt – Changing climate: a great challenge for Turkey
- 11:00-11:15 Uğur Zeydanlı, **Ayşe S. Turak**, C. Can Bilgin, Yeşim Kınıkoğlu, Semra Yalçın, Hakan Doğan – Adapting to climate change: modeling the impact of climate change on forests in the Seyhan basin and integrating adaptation measures into forestry management
- 11:15-11:30 **Direnis Çaylı**, Tuba Hande Ergüder, Barış Kaymak, Göksel N. Demirer, Sibel Uludağ Demirer – The CO2 sequestration by microalgal biomass
- 11:30-11:45 **Christos Giannakopoulos**, Anna Karali, Vassilis Psiloglou, Giannis Lemesios – Heat-related impacts of climate change in the east Mediterranean
- 11:45-12:00 **Tuba Bucak**, Dennis Trolle, Hans E. Andersen, Hans Thodsen, J. Alex Elliott, Seyda Erdoğan, Ayşe İdil Çakıroğlu, Meryem Beklioğlu – Predicting the effects of climate change and land use on lake Beyşehir and its catchment
- 12:00-12:15 **Marco Turco**, Maria-Carmen Llasat, Jost Von Hardenberg, Antonello Provenzale – Climate change leads to more frequent fires in a Mediterranean environment

12:15-12:30 **Closing**

12:30 **Lunch**

## Wednesday, 25 Jun afternoon

Tour of the Museum of Anatolian Civilizations at the Ankara Citadel (bus service provided at 14:00) on Wednesday afternoon for those not leaving immediately.

## Thursday and Friday 26-27 Jun

Optional post conf tour upon booking with the travel agent Asterya

\* visit the web page <http://medclivar.asterya.com/tours/post-cappadocia-tour/> for more info and reservation